Subject: trouble with map projections
Posted by chris.orphanides on Thu, 20 Jun 2013 18:37:06 GMT
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Hello,
I am trying to take a satellite image of sea surface temperature (SST), subset it, and then project it, and I can't seem to get it right. I am able to read the image and subset the area I am interested in without a problem. Getting it projected and having things line up is another story.

What makes sense to me is first using the map_proj_init function to create the map projection I want to put the image into (Lambert Conformal Conic), then use the map_proj_image function to warp the image to the proper projection. However, when I do this, the resulting array has lost its SST values and is all 0.0s. Can anyone tell me what I am doing wrong? I have experimented with many of the mapping capabilities in IDL, but I just can't get it right. The code I described is below Thanks in advance for your help.

```
range = [-78.1900, 34.0300, -61.8100, 45.4900]

nec_prj = MAP_PROJ_INIT('Lambert Conformal Conic', /GCTP, $
          ELLIPSOID='WGS 84', $
          LIMIT=range, $
          CENTER_LATITUDE=40.00, $
          CENTER_LONGITUDE=-70.00, $
          STANDARD_PAR1 = 36.1667, $
          STANDARD_PAR2 = 43.8333 )

necprj_sst = MAP_PROJ_IMAGE(nec_region, range, MAP_STRUCTURE = nec_prj)
;  nec_region is the SST data for the region I am interested in,
;  subset to fit the range in the lines above
```

A little additional information: The main input image before I subset it is described as being in a Cylindrical Lat-Lon projection with a regular 0.01 degree grid and a WGS 84 Ellipsoid. Since Cylindrical is the default IDL projection I didn't set a map projection for this image. I would prefer to set the ellipsoid to WGS 84 for the Cylindrical projection, though it doesn't appear possible in IDL (I would love it if I was wrong about this). Also, I am working with the type of images described here: (http://podaac.jpl.nasa.gov/dataset/JPL_OUROCEAN-L4UHfnd-GLOB -G1SST)

Thanks.

Chris